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DOI:

[10.1093/jhmas/jrq006](https://doi.org/10.1093/jhmas/jrq006)

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*Citation for published version (APA):*

Jones, E. (2010). Shell Shock at Maghull and the Maudsley: Models of Psychological Medicine in the UK. *Journal of the History of Medicine and Allied Sciences*, 65(3), 368 - 395. <https://doi.org/10.1093/jhmas/jrq006>

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## **Shell Shock at Maghull and the Maudsley: Models of Psychological Medicine in the UK**

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Journal of the History of Medicine and Allied Sciences, Volume 65, Number 3, July 2010, pp. 368-395 (Article)

Published by Oxford University Press



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# Shell Shock at Maghull and the Maudsley: Models of Psychological Medicine in the UK

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**ABSTRACT.** The shell-shock epidemic of 1915 challenged the capacity and expertise of the British Army's medical services. What appeared to be a novel and complex disorder raised questions of causation and treatment. To address these pressing issues, Moss Side Military Hospital at Maghull became a focus for experiment in the developing field of psychological medicine as clinicians from diverse backgrounds and disciplines were recruited and trained at this specialist treatment unit. By contrast, the Maudsley wing of 4th London General Hospital expanded from the neurology department of King's College Medical School and drew upon the neuropathology research of Frederick Mott at Claybury Asylum. By focusing on the psychodynamics of environmental factors, doctors at Maghull offered an alternative to the physicalist hypotheses (heredity and neuropathy acquired as a result of disease or aberrant behavior) explored at the Maudsley. To understand the cause and pathology of shell shock, both institutions admitted a diverse range of patients and experimented with treatments. The individual attention offered to service patients who were not psychotic allowed psychiatry to develop in a way that had not been possible in the county asylum system. The design and operation of Maghull and the Maudsley provided models for departments of psychological medicine in the post-war period. **KEYWORDS:** Maudsley Hospital, Maghull, psychological medicine, shell shock, psychotherapy, training.

JOURNAL OF THE HISTORY OF MEDICINE AND ALLIED SCIENCES, Volume 65, Number 3

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Advance Access publication on March 9, 2010

doi:10.1093/jhmas/jrqq06

ON 4 December 1914, the War Office took over the Moss Side State Institution at Maghull for the treatment of “soldiers suffering from nervous shock.”<sup>1</sup> In attempting to stem the advance of German forces, the British Expeditionary Force had sustained heavy casualties, not least psychiatric cases, which had overwhelmed medical facilities both in France and at home. To treat mental illness, in 1870 the British Army had opened a small asylum, “D Block,” within the grounds of the Royal Victoria Hospital, Netley.<sup>2</sup> With sufficient beds for peacetime, it could not cope with the sudden influx of psychiatric patients from the front. To provide the close attention that many psychotic patients needed and to avoid the stigma associated with public asylums, the War Office decided to open a second mental hospital.<sup>3</sup> Designed on a villa system with “single rooms and special accommodation for cases requiring isolation and supervision,” Maghull was an ideal choice, not least because the recently constructed buildings were unoccupied.<sup>4</sup> In its establishment, Maghull was neither innovative nor was it a direct response to the rapidly spreading epidemic of shell shock. During 1915, however, both its role and personnel were to experience a radical transformation.

Early in 1915, a “Neurological Section” was opened at the 4th London General Hospital (the new hospital built at Denmark Hill for King’s College London). It was designed to assess and offer preliminary treatment for all non-wounded cases of neurasthenia, hysteria, and mild psychosis invalided from France. In January 1916, a division of the section opened at the Maudsley Hospital, recently constructed on the opposite side of the road, where it became a specialist research and treatment unit under Major Frederick Mott. Maghull and the Maudsley recruited doctors and scientists who before the war had no formal connection with mental illness but in time of national emergency came together to investigate the causes of shell shock. Although staff transferred between the two hospitals,

1. Letter from the Board of Control, 3 September 1915, 3, T1/11853, National Archives, Kew, UK (hereafter NA).

2. Philip Hoare, *Spike Island. The Memory of a Military Hospital* (London: Fourth Estate, 2001), 216–23.

3. Ben Shephard, *A War of Nerves. Soldiers and Psychiatrists 1914–1994* (London: Jonathan Cape, 2000), 80–81.

4. William Aldren Turner, “Arrangements for the Care of Cases of Nervous and Mental Shock Coming from Overseas,” *Lancet*, 1916, 1, 1073–75, 1075.

each institution developed a distinct style based on the priorities set by their senior officers, Richard G. Rows and Frederick W. Mott. In essence, Maghull followed a psychodynamic agenda, while the Maudsley explored links between physiology and psychological disorders.

The historiography of shell shock identified doctors at Maghull as innovative and radical whereas the wartime story of the Maudsley has been somewhat ignored. In a key article, Shephard argued that Maghull was the “first school of clinical psychopathology in Britain” and as such represented a “landmark in psychiatric history.”<sup>5</sup> Leese depicted Maghull psychiatrists as members of a “professional and academic elite.”<sup>6</sup> Based on a study of case notes and war pension files, Barham concluded that hospitals such as Craiglockhart and Maghull “provided the conditions for more relaxed and egalitarian treatment regimes that were not entirely subjugated by traditional military values.”<sup>7</sup> Less agreement exists about whether the therapeutic insights of the specialist shell-shock hospitals were translated into civilian practice during the interwar period. Leese argued that “it proved hard to transfer the hospital’s methods elsewhere,” while Shephard believed that the very liberalism of Maghull and absence of a “coherent psychiatric school” diminished its long-term impact.<sup>8</sup> Hospitals run by the Ministry of Pensions in the interwar period, wrote Barham, adopted an enthusiasm for “a house style of military social relations” that eroded enlightened therapeutic regimes.<sup>9</sup> By contrast, Bourke argued that the “lessons learnt” from treating shell shock “were certainly instrumental in the growth of psychiatry as a discipline,” and “the war had resulted in a wider knowledge and understanding of psychological and psycho-analytical theory (albeit stripped of some of their sexual interpretations) in Britain.”<sup>10</sup>

5. Ben Shephard, “‘The Early Treatment of Mental Disorders’: R. G. Rows and Maghull, 1914–1918,” in *150 Years of British Psychiatry, Volume 2, The Aftermath*, ed. Hugh Freeman and G. E. Berrios (London: Gaskell, 1996), 434–64, 450–51.

6. Peter Leese, *Shell Shock, Traumatic Neurosis and the British Soldiers of the First World War* (Basingstoke, UK: Palgrave, 2002), 81–82.

7. Peter Barham, *Forgotten Lunatics of the Great War* (New Haven: Yale University Press, 2004), 284.

8. Shephard, “The Early Treatment,” 450–51.

9. Barham, *Forgotten Lunatics*, 285.

10. Joanna Bourke, *Dismembering the Male. Men’s Bodies, Britain and the Great War* (London: Reaktion Books, 1996), 120.

This paper explores the ways in which clinicians at Maghull and the Maudsely conceived shell shock and how this informed treatment and their understanding of the nature of neuropsychiatric disorders. The legacy of the hospitals' research and training programs is discussed to assess their impact on psychological medicine in the interwar period.

MOSS SIDE STATE INSTITUTION, MAGHULL

The Moss Side State Institution had been constructed on a villa system in 1911–12 as a colony for epileptics. It incorporated two farms and Moss Side House, a mansion built in the 1830s for Thomas Harrison, a Liverpool merchant engaged in trade with Africa.<sup>11</sup> However, in July 1913 before any patients could be treated, the buildings were acquired by the Board of Control, the government body responsible for regulating public asylums. The passing of the Mental Deficiency Act in that year, gave the Board responsibility for the care of “dangerous male and female defectives.”<sup>12</sup> Existing secure units at Broadmoor and Rampton had insufficient beds and a third hospital was needed. In July 1914, the Board of Control appointed Dr. W. Rees Thomas, MD, MRCP, DPM, as the medical superintendent of Moss Side.<sup>13</sup> Aged only 30, Thomas had been recruited from the East Sussex County Asylum, Hellingly, where he was a senior assistant medical officer. In November 1914, authorization for the employment of seventy nurses and attendants was granted,<sup>14</sup> and an assistant medical officer, Dr. H. L. Burton, aged 27, was appointed, having been deputy medical officer at Manchester Prison.<sup>15</sup> In December, when the War Office acquired the hospital, no patients had been admitted.<sup>16</sup> Thus, Maghull could open immediately for servicemen with “acute mental disorder requiring asylum care and supervision.”<sup>17</sup> With

11. John K. Rowlands, *Around Maghull and Lydiate* (Stroud, UK: Nonsuch Publishing, 2006), 64.

12. Stephen D. Kirby, “History and Development,” in *Forensic Mental Health Nursing, Current Approaches*, ed. Chris Challoner and Michael Coffey (Oxford: Blackwell Science, 2000), 288–305, 294.

13. Letter from the Board of Control, 27 July 1914, 1, T1/11853, NA.

14. Letter from the Board of Control, 25 November 1914, 1, T1/11853, NA.

15. Letter from the Board of Control, 27 November 1914, 1, T1/11853, NA.

16. Thomas Salmon, “The Care and Treatment of Mental Diseases and War Neuroses (‘Shell Shock’) in the British Army,” *Ment. Hyg.*, 1917, 1, 509–47, 519.

17. Turner, “Arrangements for the Care”, 1073.

three hundred beds and a rail link to Liverpool, the hospital was accessible, but also detached from large centers of population. Maghull was not conceived as a specialist treatment unit for shell shock but as a military asylum in the tradition of Fort Pitt, Chatham, or "D Block" at Netley.<sup>18</sup>

Once Maghull fell under the remit of the War Office, both Drs. Thomas and Burton were granted temporary commissions in the Royal Army Medical Corps (RAMC). In May 1915, however, Captain Thomas and Lieutenant Burton requested a transfer to the British Expeditionary Force in France. Because of their youth and the pressing need for doctors at the front, it was agreed they should proceed overseas. With a hospital filled with psychiatric battle casualties, replacement doctors were urgently needed. Aged 48, Dr. R. G. Rows, assistant medical officer and pathologist at the County Asylum, Lancaster, was appointed temporary medical superintendent at an annual salary of £450, together with board and lodging.<sup>19</sup> In July 1915, other appointments included: Dr. C. F. F. McDowall as assistant medical officer, formerly at Ticehurst House and Dr. Fisher, a school medical officer for the Lancashire Education Committee.<sup>20</sup>

#### MAGHULL: A CENTER OF EXCELLENCE?

Henry Head described the clinical staff at Maghull as "the brilliant band of workers who at that time made Maghull the centre for the study of abnormal psychology."<sup>21</sup> While this epithet may have been justified by 1918, it did not reflect the hospital's origins, while recruitment initially owed much to chance rather than careful planning. Unsure about the nature of shell shock, whether it was a novel illness or a disguised form of an existing disorder such as railway spine or neurasthenia, Major Rows turned to Professor Grafton Elliot Smith of Manchester University for advice.<sup>22</sup> As the dean of its medical school with a special interest in cerebral

18. Edgar Jones and Simon Wessely, *Shell Shock to PTSD, Military Psychiatry from 1900 to the Gulf* (Hove, UK: Psychology Press, 2005), 5–8.

19. Letter from the Board of Control, 1 May 1915, 1–2, T1/11853, NA.

20. Letter from the Board of Control, 10 June 1915, 1, T1/11853, NA.

21. Henry Head, "Obituary of W.H.R. Rivers," *Br. Med. J.*, 1923, 1, 977.

22. T. H. Pear, "Reminiscences" (typescript, 25 April 1959), 13.

morphology, he came with experience in management and research.<sup>23</sup> Elliot Smith, in turn, recruited T. H. Pear, a lecturer in psychology. In September 1915, the Board of Control approved the appointment of the two Manchester staff on the understanding that they agreed to “undertake work at the hospital during the summer vacation and also for three to four days a week during the winter without pay and without military rank.”<sup>24</sup> As an inducement, Rows provided them with board and lodging at Moss Side House, his hospital residence.

Elliot Smith gave Rows an added measure of intellectual authority when dealing with the War Office or senior RAMC officers. Wishing to remain outside the formal hierarchy and free to publish on controversial subjects, Elliot Smith did not take military rank. Although youthful, Pear was to prove a dynamic force at Maghull, acting as lubricant between his more senior colleagues.<sup>25</sup> He had qualified in psychology at University College London, having previously studied physics at King’s College London where his interest in the social sciences had been ignited lectures given by C. S. Myers. In 1909, Pear had been appointed to Manchester University’s first lectureship in psychology where he was encouraged to join the “pathological tea club”; this, in turn, brought him into contact with a diverse group of inquiring scientists and served as a model for common room debates at Maghull.

In July 1915, at the request of Elliot Smith, W. H. R. Rivers was the next high-profile doctor to arrive at Maghull.<sup>26</sup> Having returned from an expedition to New Zealand and the New Hebrides in spring 1915, he had no wartime role in Cambridge and, according to Pear, took the post with enthusiasm:

An hour after arrival, [Rivers] got down to work. He told me that his recent absence in the Pacific had prevented his knowing much about Freud. He was sure that Freud was a great thinker, whose

23. H. A. H., “Obituary, Sir Grafton Elliot Smith,” *Br. Med. J.*, 1937, 1, 99–101.

24. Letter from the Board of Control, 3 September 1915, 1, T1/11853, NA.

25. Alan Costall, “Pear and His Peers,” in *Psychology in Britain, Historical Essays and Personal Reflections*, ed. G. C. Bunn, A. D. Lovie and G. D. Richards (Leicester: British Psychological Society, 2001), 188–204.

26. Letter from the Board of Control, 3 September 1915, 2, T1/11853, NA.



concepts of the unconscious were overdue... Yet he knew that Freud's anthropology was out of date and second hand.<sup>27</sup>

Rivers, Head, and Elliot Smith had all been researchers at St John's College Cambridge. Indeed, on the 1898 expedition to the Torres Straits, Rivers was accompanied by his students Myers and William McDougall, both of whom were to work at Maghull.<sup>28</sup> By 1915, Rivers had achieved international status and had just been awarded the Gold Medal of the Royal Society. As a result, he was funded throughout his time at Maghull by the Medical Research Committee (MRC). Rivers reported his findings to the Committee in August 1917 before his transfer to Craiglockhart.<sup>29</sup> Rows, too, was supported by the MRC possibly at the request of Rivers, and in October 1915 wrote a paper for them on treatments pioneered at Maghull<sup>30</sup>; this was subsequently published in the *British Medical Journal*.<sup>31</sup>

In September 1915, J. W. Astley Cooper and William Brown, both appointed to temporary commissions in the RAMC, were deployed to the hospital. Brown had studied mental philosophy before qualifying in medicine and was reader in psychology at King's College London. He worked at Maghull for six months before transferring in spring 1916 to the Maudsley as a resident medical officer, being the first of a number to move between the two hospitals.<sup>32</sup> Cooper, by contrast, specialized in psychological approaches to the treatment of alcoholism, including hypnotism. Brown too had an interest in hypnotism but also studied mediums and psychical phenomena.

#### PATIENTS AND TREATMENT

Patients were first admitted on 21 December 1914. Maghull had a capacity of three hundred beds, though the construction of

27. Pear, "Reminiscences," 16.

28. Richard Slobodin, *W. H. R. Rivers, Pioneer Anthropologist, Psychiatrist of the Ghost Road* (Stroud, UK: Sutton Publishing, 1997), 24.

29. *Third Annual Report of the Medical Research Committee, 1916–1917* (London: HMSO, 1917), 81–82, FD2/3, NA.

30. *Second Annual Report of the Medical Research Committee, 1915–1916* (London: HMSO, 1916), 65, FD2/2, NA.

31. R. G. Rows, "Mental Conditions following Strain and Nerve Shock," *Br. Med. J.*, 1916, 1, 441–43.

32. William Brown, "The Psychologist in Wartime," *Lancet*, 1939, 1, 1288.

temporary huts in 1917 provided a further two hundred and an opportunity for smaller therapeutic communities. In total, Maghull treated 3,638 patients between 1914 and mid-1919.<sup>33</sup> Most were non-commissioned officers (NCOs) and other ranks, though a thirty-five-bed ward for officers was opened at Quarry Brook House nearby at the end of 1917.

Maghull, as a self-contained institution, opened to treat "border-line" cases and those with severe mental illness, thereby avoiding in the short term the necessity of sending psychotic soldiers to county asylums.<sup>34</sup> This role, in part, explains why no officers were admitted; they were treated at home or in private asylums. A typical early case, described by William Brown, suffered from persecutory delusions and auditory hallucinations and had a history of self harm.<sup>35</sup> Doctors believed that a stressful event, such as an artillery bombardment, had the capacity to trigger both serious mental illness and neurosis, depending on the heredity and childhood experience of the soldier. In his campaign to raise staffing ratios, Rows argued in September 1915 that if "individual treatment is given there are good prospects of restoration of health; if not, the patients are liable to drift into chronic insanity."<sup>36</sup>

However, it soon became apparent that an increasing number of psychiatric casualties invalided from France were not suffering from major mental illness but exhibited the features of hysteria or neurasthenia. In the prewar period, such "functional cases," that is those for which no organic cause could be discovered, were the subject of marginal but growing interest.<sup>37</sup> In 1912, for example, Bernard Hart had published a psychodynamic interpretation of severe mental illness under the title *The Psychology of Insanity*,<sup>38</sup> and in the following year a Diploma of Psychological Medicine had been established at Cambridge.<sup>39</sup> By late 1915, influenced by

33. J. K. Rowlands, "A Mental Hospital at War" (unpublished paper, 1985), 11.

34. Turner, "Arrangements for the Care," 1073.

35. Rows, "Mental Conditions," 441-43.

36. Letter from the Board of Control, 3 September 1915, 2, T1/11853, NA.

37. Arthur Hurst, *A Twentieth Century Physician, Being the Reminiscences of Sir Arthur Hurst* (London: Edward Arnold, 1949), 103; Millais Culpin, "The Problem of the Neurasthenic Pensioner," *Br. J. Psychol. Gen. Sect.*, 1920, 1, 316-26, 316.

38. Bernard Hart, *The Psychology of Insanity* (Cambridge: University Press, 1912).

39. "Examination for the Diploma in Psychological Medicine," *J. Ment. Sci.*, 1913, 19, 167-69.

psychodynamic ideas, doctors at Maghull had begun to believe that war neuroses could be cured by a range of therapies, most of which demanded individual attention. They were sympathetic to the ideas of Joseph Dejerine, professor of neurology at the Salpêtrière, who argued that the symptoms, signs, and causes of hysteria were subtly different in each patient.<sup>40</sup> Because soldiers with psychosis often demanded disproportionate staff time and could be disruptive to ward regimes, it was decided that the hospital would focus exclusively on war neuroses.<sup>41</sup> Accordingly, in January 1916, sixty certifiable cases were transferred from Maghull to Dykebar War Hospital at Paisley.<sup>42</sup> All sixty had been in treatment for at least six months and some for over a year. From Dykebar, only two (3 percent) returned to duty and thirty-nine (63 percent) were referred to asylums, while sixteen (25 percent) were discharged to their families.

Having decided to treat shell shock and other war neuroses, Rows and Elliot Smith persuaded the War Office to increase the medical establishment at Maghull and by 1917, Pear recalled, there were twenty-five doctors on the staff there (one to twenty patients), though this total included trainees.<sup>43</sup> Among the doctors working there were: Henry Yellowlees, T. A. Ross, Bernard Hart, R. G. Gordon, William McDougall, A. B. Howitt, E. F. Reeve, C. G. Seligman, R. C. Clements, and E. N. Snowden, while a number of U.S. doctors also visited, including J. T. MacCurdy, J. A. Berlyn, Karl M. Bowman, and Douglas A. Thom.

#### THE "MAUDSLEY NEUROLOGICAL CLEARING HOSPITAL"

While Maghull opened as a traditional military lunatic asylum, the Maudsley Hospital had been designed as a research-oriented institution to treat voluntary patients in the early stages of mental illness.<sup>44</sup> A prime mover in the scheme, Frederick Mott had sought to establish a hospital that might match Emil Kraepelin's clinic in terms of

40. Gregory M. Thomas, *Treating the Trauma of the Great War, Soldiers, Civilians and Psychiatry in France, 1914–1940* (Baton Rouge: Louisiana State University Press, 2009), 22.

41. Edward Mapother to Colonel A. W. Sheen, 29 December 1919, PIN15/55, NA.

42. R. D. Hotchkis, "Renfrew District Asylum as a War Hospital for Mental Invalids," *J. Ment. Sci.*, 1917, 23, 238–49.

43. Pear, "Reminiscences," 14.

44. Edgar Jones, Shahina Rahman, and Robin Woolven, "The Maudsley Hospital: Design and Strategic Direction, 1923–39," *Med. Hist.*, 2007, 51, 357–78, 360.

laboratory and training facilities. Having confirmed that general paralysis of the insane was a manifestation of syphilis, Mott's inclination was to look for the physical causes of psychiatric disorders. Although funds for the Maudsley Hospital had been raised in 1911, a building strike had delayed construction, which was still underway at the outbreak of war.<sup>45</sup>

On the opposite side of the road from the Maudsley, King's College Hospital moved into its purpose-built accommodation in July 1913. Shortly after the outbreak of hostilities, it was taken over by the War Office as the 4th London General Hospital for wounded and sick servicemen. It became a focus for the investigation and treatment of shell shock because William Aldren Turner, physician in charge of neurology at King's, held a commission in the Territorial Army. The intense fighting around Ypres in October 1914 saw large numbers of servicemen invalided home with functional nervous disorders. The diversity of their symptoms was a cause for concern as they suggested a novel and potentially disabling condition.<sup>46</sup> In December 1914, Lt. Colonel Turner crossed to France for three months to study individual cases and make recommendations about their management.<sup>47</sup> Shell-shock casualties were treated in general wards alongside other sick and wounded. To concentrate their numbers for investigation and specialist treatment, Turner left instructions for their transfer to a single hospital in the UK.<sup>48</sup> In January 1915, Turner asked Captain C. S. Myers, then working at the Duchess of Westminster's Hospital in Le Touquet, to take responsibility for shell-shock cases in the British Expeditionary Force so that he could return to Denmark Hill. Myers agreed and the transfer took place in March.<sup>49</sup> In spring 1915, a "neurological clearing section" under the command of Turner was set up within the 4th London General Hospital to investigate and classify shell-shock patients invalided from Flanders.<sup>50</sup> The term "neurological," rather than "psychiatric," was used because at this stage, shell shock

45. Frederick Mott, "Second Maudsley Lecture," *J. Ment. Sci.*, 1921, 27, 319–39, 321.

46. William Aldren Turner, "Cases of Nervous and Mental Shock Observed in the Base Hospitals in France," *J. R. Army Med. Corps*, 1915, 24, 343–52.

47. Anon., "Obituary, William Aldren Turner," *Lancet*, 1945, 2, 222–23.

48. War Diary, Director of Medical Services, Lines of Communication, 25 January 1915, WO95/3977, NA.

49. C. S. Myers, *Shell Shock in France 1914–18* (Cambridge: University Press, 1940), 15.

50. Salmon, "The Care and Treatment of Mental Diseases," 520.

was considered an organic disorder, a consequence either of concussion or a toxin.

The task at King's, to discover the pathology of shell shock, fell to Mott, the director of the Central Pathological Laboratory funded by the London County Council at Claybury Asylum. Appointed to a temporary commission in the RAMC, Mott suggested to Sir Alfred Keogh, director-general of army medical services, that the Maudsley serve as an annex to King's for "the treatment of the more serious cases of war psychoneuroses and psychoses."<sup>51</sup> With Keogh's approval, the pathological laboratory at Claybury was dismantled and transferred to Denmark Hill to give Mott direct access to patients.<sup>52</sup>

The neurological section of 4th London General Hospital received financial support from the MRC, which in 1915 paid the full-time salary of Dr. Cicely May Peake.<sup>53</sup> Mott hypothesized trench warfare damaged the function of the central nervous system and that those with an "inborn timorous or neurotic disposition" or those who had suffered a head injury or disease during service were particularly prone to shell shock.<sup>54</sup> Dr. Peake discovered from a survey of admissions that "a large majority of the cases of so-called shell shock . . . occurred in individuals who either had a nervous temperament or were the subjects of an acquired or inherited neuropathy."<sup>55</sup> In the following year, Dr. Edith Green, an MRC research scholar, investigated the blood pressure and surface temperature of shell-shock cases.<sup>56</sup> Her research suggested that hypotension was correlated with many of the symptoms of shell shock, in particular nightmares, fatigue, irritability, and depression. Equally, a return to normal blood pressure was found "in nearly every case . . . [to be] accompanied by a change in the character of the dreams, the terror element being less marked."<sup>57</sup> Mott estimated that 10 percent of servicemen admitted to the Maudsley with neurasthenia

51. Mott, "Second Maudsley Lecture," 321.

52. Jones, Rahman, and Woolven, "The Maudsley Hospital," 360.

53. *Second Report of the MRC*, 65, FD2/2, NA.

54. Frederick W. Mott, "The Effects of High Explosives upon the Central Nervous System," *Lancet*, 1916, 1, 331-38, 441-49, 331.

55. *Ibid.*, 448.

56. *Third Report of the MRC*, 81-82, FD2/3, NA.

57. Edith M. N. Green, "Blood Pressure and Surface Temperature in 110 Cases of Shell Shock," *Lancet*, 1917, 2, 456-47, 456.

“especially when trench warfare was taking place in 1915 and 1916 suffered with signs of hyperthyroidism.”<sup>58</sup> Such findings encouraged him to seek an organic solution to shell shock, and patients were given various medicines including pituitary and thyroid extract to treat their symptoms.

The completion of the Maudsley Hospital at the end of 1915 allowed the neurological clearing station to expand beyond the King’s site.<sup>59</sup> Between October 1915 and the end of 1919, 12,438 cases passed through its doors (Table 1).<sup>60</sup> Given that there were four hundred beds allocated to the Maudsley neurological section,<sup>61</sup> this suggests an average admission of six weeks. Both officers and other ranks were admitted, though segregated in terms of accommodation. As at Maghull, a large house (“Platanes” nearby on Champion Hill built by a member of the merchant banking family of Benson)<sup>62</sup> was occupied as the “officers section,” while privates and NCOs found themselves in the main hospital wards.

By 1916, it had become clear that the attritional nature of the conflict would generate large numbers of psychiatric battle casualties. An organizational structure was put in place by the War Office in an attempt to standardize the treatment of shell-shocked soldiers.<sup>63</sup> The Royal Victoria Hospital at Netley and the Maudsley were established as assessment centers. Receiving “patients suffering from neuroses and psychoses of practically all types,” Maudsley doctors made a preliminary diagnosis and, if the soldier did not show signs of a quick recovery, “distributed each man to another hospital according to his particular type.”<sup>64</sup> The number and range of psychiatric hospitals available to the military increased throughout the war. Psychotic patients were sent to “D” Block at Netley or Napsbury War Hospital,<sup>65</sup> while Maghull was identified as

58. Frederick W. Mott, “War Neuroses,” *Br. Med. J.*, 1919, 1, 709–11, 709.

59. Jones, Rahman, and Woolven, “The Maudsley Hospital,” 357–78.

60. William Johnson and R. G. Rows, “Neurasthenia and War Neuroses,” in *History of the Great War Based on Official Documents, Medical Services, Diseases of the War*, Vol. II, ed. W. G. Macpherson, W. P. Herringham, T. R. Elliott and A. Balfour (London: HMSO, 1923), 1–67, 49.

61. Turner, “Arrangements for the Care,” 1074.

62. H. Willoughby Lyle, “Obituary, Harold Waterlow Wiltshire,” *Lancet*, 1937, 1, 295.

63. Johnson and Rows, “Neurasthenia and War Neuroses,” 45–49.

64. Edward Mapother, “Discussion on Functional Nervous Disease in the Fighting Services,” *Proc. R. Soc. Med.*, 1936, 29, 855–68, 859.

65. Turner, “Arrangements for the Care,” 1074.

TABLE 1

## Referrals to the King's/Maudsley Neurological Clearing Section

Year	Referrals
1915 (October to December)	777
1916	3,950
1917	2,383
1918	3,097
1919	2,231
Total	12,438

Source: William Johnson and R. G. Rows, "Neurasthenia and War Neuroses", in *History of the Great War Based on Official Documents, Medical Services, Diseases of the War*, Vol. II, ed. W. G. Macpherson, W. P. Herringham, T. R. Elliott, and A. Balfour (London: HMSO, 1923), 49.

a premier tertiary treatment center, designed to take the most severe or protracted cases of shell shock. In this respect, it was the northwestern counterpart of the Springfield War Hospital, Wandsworth, and the Royal Victoria Hospital, Edinburgh.

## MAGHULL VERSUS MAUDSLEY: PSYCHOLOGICAL VERSUS ORGANIC

By January 1916, Frederick Mott had reached preliminary conclusions about the status of shell shock.<sup>66</sup> In essence, he believed that it had an organic basis. Forces created by blast or a toxic effect damaged the function of the central nervous system. A physical concussion ("commotio cerebri"), the inhalation of noxious gases, or a combination of the two, were identified as the primary causes. This hypothesis was supported by postmortem studies which showed "microscopic hemorrhages" in brain tissue and cerebrospinal fluid withdrawn by lumbar puncture containing blood and albumin.<sup>67</sup> However, he did not exclude "psychic trauma" as a contributory factor. Because "neuro-potentially sound sergeants, non-commissioned officers and privates, who after fighting at the front

66. F. W. Mott, "Special Discussion on Shell Shock without Visible Signs of Injury," *Proc. R. Soc. Med.*, 1916, 9, i-xxiv.

67. F. W. Mott, "British Medical Association: Special Clinical Meeting. War Neuroses," *Br. Med. J.*, 1919, 1, 709-11, 709.

for long periods,” had the symptoms of shell shock, he concluded that “severe nervous strain and fearful apprehension” played a part.<sup>68</sup> Mott argued that in extreme circumstances “even the strongest man will succumb, and a shell bursting near may produce a sudden loss of consciousness, not by concussion or commotion but by acting as the ‘last straw’ on an utterly exhausted nervous system.”<sup>69</sup> This evidence, together with his prewar research into hereditary predisposition to severe mental illness, led Mott to conclude that most soldiers who succumbed to war neuroses had an “inborn predisposition of emotivity,” or were “victims of an acquired, or inherited neuropathy.”<sup>70</sup> Such individuals, he believed, were more likely to suffer from shell shock after concussion or exposure to a toxin. The essential element of any assessment, according to Mott, was history taking to establish “how much of his [the patient’s] disability is due to pre-war acquired conditions and how much to his inborn constitutional make-up” to gauge the extent to which military service had impacted on his mental state.<sup>71</sup>

Nevertheless, Mott did not ignore psychological processes and argued that they caused certain symptoms such as functional mutism and loss of hearing. These effects, which could be suddenly reversed, Mott argued were “psychic rather than physical” and no different from “hysterical mutism” seen in civilians before the war.<sup>72</sup> Mott proposed a physiological explanation: “an *anxiety neurosis* keeps up this mutism by dissociating the cortical ideation neurones of internal language and feeling from the effector neurones which direct and control the breath and its mode of escape.”<sup>73</sup> Thus, the difference between Mott and the Maghull doctors was that he saw “emotional” symptoms as secondary to a physiological process, whereas Rows and his colleagues viewed them as primary.

According to Pear’s recollections, Rows considered the physiological approach was “getting in the way of something very

68. Mott, “Special Discussion on Shell Shock,” ii.

69. F. W. Mott, “Mental Hygiene and Shell Shock during and after the War,” *Br. Med. J.*, 1917, 2, 39–42, 39.

70. Frederick Mott, *War Neuroses and Shell Shock* (London: Henry Frowde, 1919), viii, 107.

71. Mott, *War Neuroses*, 267.

72. Mott, “Special Discussion,” xvii.

73. *Ibid.*, xx.



important” and that Mott was “somebody who ought to be opposed.”<sup>74</sup> In their 1917 study of shell shock, Elliot Smith and Pear acknowledged that psychiatric disorders had an “underlying physical basis,” but concluded that of “the molecular and biochemical aspects of that basis we know practically nothing which would help us understand even ordinary mental processes.”<sup>75</sup> Accordingly, thinking at Maghull focused on what were considered realizable aims: the elucidation of psychological explanations and treatments.

The fundamental change in thinking at Maghull was to recategorize hysteria and neurasthenia not as “functional nervous disorders” but as forms of “psychoneurosis.”<sup>76</sup> The former implied that symptoms were a result of a pathological change to the operation of the central nervous system. The Maghull doctors became increasingly critical of this hypothesis and moved toward a “mental or psychological” explanation. The practice of T. A. Ross illustrated the transition. In the prewar period, he had treated neurasthenia by the Weir-Mitchell method (rest, substantial diet, and massage designed to restore the nervous system). In time, he concluded that these patients were more than simply exhausted, and as his disillusionment with the treatment increased, so his clinical success declined. By 1914, according to Arthur Hurst, he had decided to explore psychotherapy as a way of restoring a patient’s trust in themselves.<sup>77</sup> The Maghull doctors hypothesized that a terrifying event (such as an artillery bombardment or the horrific death of a close friend) could trigger a traumatic neurosis in individuals with pre-existing vulnerabilities or repressed conflicts.<sup>78</sup> Resolution of these disorders, they believed, could be most effectively addressed by a psychological method of treatment. Physical processes were not ignored but relegated to a subsidiary role.

A case study published by Rivers in 1917 illustrated the Maghull approach. It concerned an RAMC doctor whose claustrophobia

74. T. H. Pear, “Reminiscences of Wurzburg, and Some International Congresses of Psychology” (typescript, 20 August 1960), 8.

75. G. Elliot Smith and T. H. Pear, *Shell Shock and Its Lessons* (Manchester: University Press, 1917), 97.

76. Bernard Hart, “The Modern Treatment of Functional Nervous Disorders,” *Br. Med. J.*, 1920, 1, 207–11.

77. Arthur Hurst, “Obituary T.A. Ross,” *Br. Med. J.*, 1941, 1, 463.

78. T. A. Ross, *Lectures on War Neuroses* (London: Edward Arnold, 1941), 26.

had become unmanageable when working from a dugout in the front line.<sup>79</sup> After hospitalization in France and the UK, the doctor was referred to Rivers at Craiglockhart. Abreaction and dream analysis revealed a forgotten childhood episode involving terror of confinement. The officer's shell shock was interpreted as an elaboration of this repressed experience. Rivers treated the underlying phobia, pronouncing the officer cured when he could travel on the London Underground. This case became almost iconic of the Maghull method and inspired Myers to write from France:

I have just read your last *Lancet* article and write hot with enthusiasm for it. It is by far the best and most interestingly worked out case of the kind that has been published during the war. . . . Your conclusions agree absolutely with mine.<sup>80</sup>

Rivers summarized the new thinking in his foreword to MacCurdy's book on *War Neuroses* published in 1918:

In the early days of the war the medical profession . . . was inclined to emphasise the physical aspect of the antecedents of a war neurosis. As the war has progressed the physical conception has given way before one which regards the shell explosion or other catastrophe of warfare as, in the vast majority of cases, merely the spark which has released long pent up forces of a psychical kind.<sup>81</sup>

Furthermore, the Maghull doctors placed an emphasis on nurture rather than nature in the causation of war neuroses. Pear recalled that "the culture-pattern theory was still below the horizon but some of the discussions at Maghull got near it."<sup>82</sup> Elliot Smith's ideas about the psychology of shell shock were "closely related" to his "theory of the diffusion of culture from ancient Egypt."<sup>83</sup> In essence, he challenged the hypothesis of a "basic psychic unity," and argued that patterns of behavior and beliefs had spread from ancient Egypt along trade routes and the paths taken by the migration of

79. W. H. R. Rivers, "A Case of Claustrophobia," *Lancet*, 1917, 2, 237-40.

80. Quoted from C. Crampton, "The Cambridge School: The Life Work and Influence of James Ward, W.H.R. Rivers, C.S. Myers and Sir Frederick Bartlett" (PhD diss., University of Edinburgh, 1978), 204.

81. W. H. R. Rivers, "Preface," in John T. MacCurdy, *War Neuroses* (Cambridge: University Press, 1918), vi.

82. Pear, "Reminiscences," 15.

83. *Ibid.*, 8.

tribes.<sup>84</sup> Elliot Smith and Pear proposed a cultural explanation for shell shock. An army at war could offer little tolerance of fear and stress, while emphasizing the virtues of regimental loyalty. Hence, the only escape route for a terrified or war-weary soldier was a wound or sanctioned illness. Shell shock rapidly gained credibility among troops because it filled the gaps left by physical medicine and military discipline. Shell shock, Elliot Smith and Pear observed, was “an inadequate title for all those mental effects of war experience which are sufficient to incapacitate a man from the performance of his military duties.”<sup>85</sup>

In writing *Shell Shock and Its Lessons* (1917), Pear recalled, “we knew perfectly well all the time that if we wanted to get public sympathy for a hospital we must not try to force new words like psychoneuroses and psychiatry on to the general public. The general public had got to think that shell shock covered any kind of nervous disorder arising.”<sup>86</sup> The critical stance adopted by the Maghull team was evident from this work. Grafton Elliot Smith was “the quietest of men outwardly,” recalled Pear, but, “he loved a scrap. When we were writing *Shell Shock and Its Lessons*, he would greet me in the morning with ‘Hello; let’s stir old so and so up’ . . . Graff[ton] was no respecter of persons; he had no side.”<sup>87</sup>

Robert Armstrong-Jones, medical superintendent of Claybury Asylum, was probably one of the establishment figures that Elliot Smith sought to upset. In his book review published in *Nature*, Armstrong-Jones chastized them for rejecting any “anatomical, pathological or chemical evidence of inheritance in the cases of psycho-neuroses.” He accused them of being “out-and-out environmentalists” in ascribing only psychological origins to shell shock.<sup>88</sup> Mott and Armstrong-Jones argued that their rejection of the physical context in which shell shock arose was a fundamental flaw.<sup>89</sup> Indeed, Captain Julian Wolfsohn, a U.S. Army doctor working at the Maudsley, who had been encouraged to research the

84. R. F. Barbour, J. C. Flugel, and T. H. Pear, “Psychological Implications of the Culture-pattern Theory,” *Nature*, 1945, 155, 776–78.

85. Smith and Pear, *Shell Shock and Its Lessons*, 1–2.

86. Pear, “Reminiscences,” 7.

87. *Ibid.*, 8.

88. Robert Armstrong-Jones, “The Psychopathy of the Barbed Wire,” *Nature*, 1918, 100, 1–3.

89. Shephard, “Rows and Maghull,” 446.

heredity of hundred shell-shock patients, found 74 percent had "a family history of neurotic or psychotic stigmata" compared with 10 percent in wounded controls.<sup>90</sup> This study convinced Mott that his initial hypothesis about the "emotional" form of shell shock was well founded and he wrote: "my experience now based upon statistics proves conclusively that by far the most important factor in the genesis of war psycho-neurosis is an inborn or acquired tendency to emotivity."<sup>91</sup>

#### MAGHULL: CONFLICT OF THERAPEUTIC CULTURE

Elliot Smith declined to join the RAMC, believing that military culture was antithetical to therapy: "the subjection of men to irksome regulations of military discipline . . . is often so potent a factor in producing disturbances as to be quite fatal to any hope of amelioration."<sup>92</sup> Pear acknowledged that "for the mentally healthy soldier, obedience to stern and even harshly rigid regulations is often vitally important; but an attempt by a medical officer to treat a ward of neurasthenic patients in this way usually has disastrous results."<sup>93</sup> This approach did not always meet with approval from military members of staff. Pear recalled that "some 'firm' nurses and NCO attendants complained that after they had 'disciplined' a patient, he was so inconsiderate as to apply to them the single-combat tactics taught in the army."<sup>94</sup>

Showalter has argued that some army doctors conceived of shell shock as "male hysteria," the masculine equivalent of a disorder traditionally associated with women.<sup>95</sup> However, the connection between sexual anxiety and shell shock was tenuous and indeed was explicitly rejected by the Maghull doctors, including Rivers, who suggested that the instinct for self-preservation played a key role.<sup>96</sup> Meyer has argued that concepts of maturity and childishness were

90. Julian M. Wolfsohn, "The Predisposing Factors of War Psycho-neuroses," *Lancet* 1918, 1, 177-180, 180.

91. Frederick W. Mott, "War Psycho-neurosis (II). The Psychology of Soldiers' Dreams," *Lancet* 1918, 1, 169-72, 170.

92. Smith and Pear, *Shell Shock and Its Lessons*, 14.

93. *Ibid.*, 28.

94. Pear, "Reminiscences," 14.

95. Elaine Showalter, *The Female Malady: Women, Madness and English Culture 1830-1980* (London: Virago, 1987), 167-72.

96. W. H. R. Rivers, *Instinct and the Unconscious. A Contribution to the Biological Theory of Psycho-neuroses* (Cambridge: Cambridge University Press, 1922), 4-5.

applied to war neurosis. For some, shell shock affected the immature or childlike, those who had yet to develop the force of character needed to control their emotions.<sup>97</sup> Although Rivers did not ascribe to the belief that shell-shocked soldiers needed to be turned into proper men, he concluded that shell shock resulted when an adaptive form of repression failed to operate efficiently. Because most troops were not regulars but had volunteered or had been conscripted into the army and trained in great haste, they had not had the time to build up an effective mechanism to deal with strong emotions. Faced with "strains such as have never previously been known in the history of mankind," he wrote, it was "small wonder that the failures of adaptation should have been so numerous and severe."<sup>98</sup>

Rather than seeking to toughen up feminine or childlike cases, Elliot Smith and Pear believed that cure in many cases could be achieved only if the fear of returning to the front was removed. Such soldiers, Elliot Smith argued, "are quite healthy from the social point of view, and quite capable of earning their own living if one discharges them in this state, so that they may take up their civil trade, or recommends them for military duty which keeps them away from the front."<sup>99</sup> Captain Millais Culpin, who had served as a surgeon in France before being posted to Maghull, concluded that sending soldiers with war neuroses back to front-line units "was often to the advantage neither of the patient nor the army, for many of the men must have had a strong disposition to such disorders so that subsequent relapse was certain."<sup>100</sup> Although realistic, this conclusion was at odds with official policy, which was to return as many invalids to fighting units as possible.

As a physician with a special interest in neurasthenia, T. A. Ross had volunteered for wartime military service. After a posting to Maghull, he was transferred to Springfield War Hospital where he saw a number of regular soldiers who had been admitted in 1914

97. Jessica Meyer, "Separating Men from the Boys: Masculinity and Maturity in Understanding Shell Shock in Britain," *20 Century Br. Hist.*, 2009, 20, 4–8.

98. W. H. R. Rivers, "An Address on the Repression of War Experience," *Lancet*, 1918, 1, 173.

99. G. Elliot Smith, "Shock and the Soldier," *Lancet*, 1916, 1, 853–57, 854.

100. Millain Culpin, *Psychoneuroses of War and Peace* (Cambridge: Cambridge University Press, 1920), 31.

with severe functional symptoms. Surprisingly, these chronic cases recovered completely in summer 1918 when he assured them that "it was certain that they would not get out of the army till they were well...my arguments were grasped with ease and these patients soon got well."<sup>101</sup> Military doctors could genuinely make this offer only in 1918 when orders had been issued not to return chronic cases to duty because of high relapse rates and the pressing need to increase the production of food and munitions. This timing may also explain how Lt. Colonel Arthur Hurst, who ran a specialist rehabilitation unit for war neuroses in a newly built agricultural college at Seale Hayne, appeared to cure so many cases of chronic shell shock during 1918 when other physicians had failed.<sup>102</sup> Although Hurst argued that his success was due to "simple persuasion and re-education" in a "proper atmosphere" of cure, these factors were undoubtedly present in other shell-shock hospitals earlier in the war.<sup>103</sup>

However, the civilian perspective of Elliot Smith, Pear and Ross was not shared by many doctors whose frontline service had given them a different set of priorities.<sup>104</sup> Having observed "the wholesale panic of large units and a few cases of delirious shell shock" at Loos in September 1915, Mapother believed a military culture was an essential therapeutic element:

Every effort had to be made to discourage hysterical additions to symptoms. . . . It needed emphasis that men were in a hospital not a hotel. It was advisable that hospitals be out of towns. Discipline was all important. Even some major hospitals struck clinical observers accustomed to overseas discipline as institutes for spoiling good soldiers.<sup>105</sup>

The maintenance of discipline and the conduct of an orderly room, he recalled, were "by no means the least important department in hospitals for neurotics."<sup>106</sup> Mott, too, believed that military discipline was

101. Ross, *Lectures on War Neuroses*, 71.

102. A. F. Hurst, "War Neuroses," *Br. Med. J.*, 1918, I, 345; William S. London, "Seale Hayne Military Hospital, the Wonders of Neurology," *War Pensions Gaz.*, 1919, 27, 335-36.

103. A. F. Hurst and J. L. M. Symns, "The Rapid Cure of Hysterical Symptoms in Soldiers," *Lancet*, 1918, 2, 139-41, 140.

104. Shephard, "Rows and Maghull", 448.

105. Mapother, "Discussion on Functional Nervous Disease," 864.

106. *Ibid.*, 862.

“very essential for the treatment of hysteria,” insisting that patients stand to attention and salute officers when they entered a ward.<sup>107</sup>

#### TREATMENT AND OUTCOMES

The absence of hospital protocols, together with the autonomy granted to physicians of consultant grade, obfuscated treatment practices. “I have little idea of the methods,” Pear recalled, “which individual members of this large staff favoured. Cooper and Snowden used hypnotism; Bernard Hart adhered to no one school of thought. . . . [Henry] Yellowlees was critically appreciative of Freud.”<sup>108</sup> Trial and error lay at the root of much treatment. Captain E. F. Reeve experimented with physiotherapy to cure functional contractures, such as a clenched fist or claw foot. By continuous passive movements, he induced fatigue in the muscles responsible for the contracture thereby demonstrating to the patient that this was not an irreversible condition.<sup>109</sup> Because the Maghull doctors drew inspiration from a wide range of authors, including Babinski, Dejerine, Trotter, Janet, Jung, Freud, and the anthropologist, Malinowski whom Rivers had met in New Guinea, no single school of thought emerged from Maghull.<sup>110</sup> Something of the diversity of opinion was revealed in Hart’s 1918 paper on “methods of psychotherapy,” which assessed the merits of suggestion, persuasion and analysis, concluding that none alone was sufficient to cure chronic functional disorders: “treatment can only be efficient if their nature and limitations are clearly understood, so that the physician may choose and combine his weapons according to the condition which has to be attacked.”<sup>111</sup>

Equally, we know little about Maudsley treatments apart from Mott’s description of the hospital’s “atmosphere of cure.” Hypnosis and psychoanalysis, he argued, were not “necessary or even desirable.”<sup>112</sup> A quiet, recuperative environment would enable servicemen to forget their traumatic experiences: “the continuous

107. Mott, *War Neuroses and Shell Shock*, 277.

108. Pear, “Reminiscences,” 15.

109. E. F. Reeve, “The Treatment of Functional Contracture by Fatigue,” *Lancet*, 1917, 2, 419–21.

110. T. H. Pear, “Notes” (typescript, 17 April 1953), 3.

111. Reprinted in Bernard Hart, *Psychopathology, Its Development and Its Place in Medicine* (Cambridge: University Press, 1927), 123–53, 153.

112. Mott, “The Effects of High Explosives”, 553.

warm baths, of which there are eight, are especially valuable for promoting the action of the skin, of relaxing tired muscles, and by their soothing influence helping to induce sleep." Mott was sceptical of the value of psychotherapy in part because he believed that few doctors possessed the "delicacy and sympathy" required to address "psychic wounds."<sup>113</sup> He saw no value in catharsis and advocated "diversion of the mind from the recollection of their terrifying experiences is essential for successful treatment." A period of distracted convalescence was the therapy proposed by Mott: "only common-sense and interest in the comfort, welfare and amusement of these neurotic patients are necessary for their recovery."<sup>114</sup> He believed that "simple games, knitting or wool work, bead work, basket work and net making" offered an appropriate therapeutic environment.<sup>115</sup>

However, Mott was not averse to theatrical tricks and treated servicemen with electric shock. In 1919, he recalled, "many physicians do not care to use faradism to reinforce persuasion; but this method of physio-psycho-therapy or other physical means of reinforcing suggestion and re-education I have employed with great success."<sup>116</sup> He also invented false medical explanations: "I have cured functionally paralysed hands . . . by telling patients that their hands are cold and benumbed and that the blood supply to the part is insufficient to excite the nerves . . . but after it has been warmed by radiant heat they will be conscious of it and be able to move the fingers."<sup>117</sup> The best tonic, he conceded, could be offered from late 1917 and was the assurance on admission that "under the new system of categories they cannot be found fit for service for six months, and probably that they will not be sent on general service again."<sup>118</sup>

Goals of treatment were largely determined by what doctors considered desirable or achievable. Opinion was divided. Civilians such as Pear and Elliot Smith thought that return to an active working

113. Mott, "War Psycho-neurosis (II)," 172.

114. Mott, "The Effects of High Explosives", 553.

115. Mott, 'Mental hygiene and Shell Shock', 41-42.

116. F. W. Mott, "War Neuroses," *Br. Med. J.*, 1919, I, 442.

117. *Ibid.*

118. F. W. Mott, "War Psycho-neurosis (I). Neurasthenia: The Disorders and Disabilities of Fear," *Lancet*, 1918, I, 127-29, 128.



life was a success, while some RAMC doctors who had seen active service in France believed that the primary aim should be return to full duty overseas. Other RAMC doctors, such as Ross and Culpin, considered this unrealistic and settled for a return to base jobs and other noncombatant roles. The year ending 30 June 1917, 731 patients were discharged from Maghull: 153 (20.9 percent), returned to some form of military duty, 476 (65 percent) left the armed forces for civilian life, 7 (1 percent) were referred to civilian mental hospitals, 4 (0.6 percent) deserted, and 3 (0.4 percent) died.<sup>119</sup> Because the Maudsley received patients of all types from mild to severe at an earlier stage in their treatment, outcomes recorded in June 1916 were more successful: 40 percent returned to light military duty, 20 percent invalided from the armed forces, and 20 percent referred for further treatment at specialist units.<sup>120</sup>

#### SHELL-SHOCK CRISIS OF 1917: TRAINING IN MILITARY PSYCHIATRY

During 1917, the battles of Arras, Messines, and Passchendaele produced a flood of shell-shock cases, overwhelming medical facilities in France. Evacuated to the UK, large numbers ended up in general hospitals where because of lack of knowledge among the medical staff, they were invalided from the army. To stem the loss of fighting men in a context of manpower shortages, an emergency conference was held at the War Office Conference between 15 and 23 October 1917. Myers travelled to London from France to attend. He proposed a system of direct referral from the battlefield to specialist treatment centers in the UK.<sup>121</sup> On the basis of what had been found at Maghull, Myers argued that effective treatment required individual attention, which in turn demanded higher staffing ratios (ideally one doctor to fifty patients). If this policy were to be implemented, doctors had to be trained in the principles and practice of military psychiatry and in particular, the treatment of shell shock.<sup>122</sup>

119. Thomas Salmon, *Medical Department of the US Army, Vol. X, Neuropsychiatry* (Washington, DC: Office of the Surgeon General, 1929), 511.

120. Turner, "Arrangements for the Care," 1075.

121. Myers, *Shell Shock in France*, 111–12.

122. *Ibid.*, 112–14.

Under extreme pressure to return as many psychiatric casualties to duty, the War Office agreed as Myers recalled that

several of these “neurological” hospitals should serve as training “centers” for junior medical officers; the Military Hospital at Maghull . . . constituting the first training “center” for this purpose. To this hospital, at my request, I was posted on 27 November 1917 . . . I was asked to give Major Rows any assistance he might desire in his next course of training which was to begin immediately.<sup>123</sup>

Myers saw the virtue of formal organization, having set up the Diploma in Psychological Medicine at Cambridge University in 1913, so it was not surprising that he found himself posted to Maghull for this purpose.<sup>124</sup> There, he wrote, “a new class of medical man, educated in the psychological theories and practice . . . is being trained.”<sup>125</sup> Indeed, in 1918 Aldren Turner described Maghull as hosting “the first and at the present the only school of clinical psycho-pathology in this country.”<sup>126</sup>

Between December 1917 and March 1919, 56 RAMC officers attended the three-month courses.<sup>127</sup> Rows, Cooper, Pear, and Hart undertook much of the teaching, while lectures were given by Henry Yellowlees, William McDougall, C. G. Seligman, J. T. MacCurdy, Ross, and Myers. At least two three-month courses, which included lectures and clinical instruction, were held at the Maudsley during 1918, the first having been attended by 20 military physicians and 20 civilian practitioners.<sup>128</sup> A group photograph taken in December 1918 showed the tutors gathered outside the entrance to the hospital.<sup>129</sup> They were specialist shell-shock doctors who took referrals from the Maudsley including Wilfred Harris and Ross at Springfield, E. Farquar Buzzard at the National Hospital for Nervous Diseases, Queen’s Square, George Riddoch, and

123. *Ibid.*, 114–15.

124. John Forrester, “1919: Psychology and Psychoanalysis, Cambridge and London – Myers, Jones and MacCurdy,” *Psychoanal. Hist.*, 2008, 10, 37–94, 39–40.

125. C. S. Myers, *Present-day Applications of Psychology, with Special Reference to Industry, Education and Nervous Breakdown* (London: Methuen, 1918).

126. William Aldren Turner, “Neuroses and Psychoses of War,” *J. R. Army Med. Corps*, 1918, 31, 399–413, 412.

127. Johnson and Rows, “Neurasthenia and War Neuroses,” 49.

128. “Shell Shock and War Neuroses,” *Br. Med. J.*, 1918, 2, 260.

129. Photograph collection, Bethlem Royal Hospital Archives and Museum, Beckenham, Kent, U.K.

W. H. R. Rivers at the Empire Hospital for Injuries of the Nervous System, Vincent Square, Westminster, Bernard Hart at the Special Hospital for Officers, 10 Palace Green, Kensington, and G. W. B. James who worked either at the Maudsley itself or at Springfield, having trained under Harris at Hanwell Asylum before the war.

Not only was the legacy of Maghull spread by teaching, many of its key figures published their ideas in the aftermath of the conflict. In 1920, Culpin wrote *Psychoneuroses of War and Peace*, two years later Pear completed *Remembering and Forgetting*, Rivers wrote *Instinct and the Unconscious*, and, in 1923, T. A. Ross published *The Common Neuroses, Their Treatment by Psychotherapy*. Having been appointed physician in psychological medicine at University College Hospital, in 1927, Bernard Hart wrote *Psychopathology, Its Development and Place in Medicine*; though he explored the general principles of neuroses, he curiously made little reference to his wartime work.<sup>130</sup> Indeed, this was a general feature of these writings; reference to the war itself was largely absent.

#### AFTERMATH: TRAINING CENTER

The Armistice left the Ministry of Pensions responsible for the welfare of veterans with psychological disorders. To reduce the cost of financial compensation and return shell-shocked ex-servicemen to productive employment, the Ministry set up a national network of 29 outpatient psychotherapy centers (called "Special Medical Clinics"). Some of the tutors at Maghull, including Pear, trained the doctors engaged to practise brief, focused therapy.

Many of the psychiatrists who worked at Maghull found their careers had not been hindered by their war service. Rows took a senior post at Tooting Neurological Hospital before his death in 1925; Elliot Smith secured the prestigious chair of anatomy at University College London; Ross went to the Cassel Hospital as its medical director; Millais Culpin joined the London School of Hygiene and Tropical Medicine as a lecturer where in 1931 he secured a chair, while Pear returned to Manchester University, becoming the first full-time professor of psychology in the UK. Myers negotiated a new readership at Cambridge before resigning

130. Bernard Hart, *Psychopathology, Its Development and Its Place in Medicine* (Cambridge: University Press, 1927).

in disgust, while Rivers returned there to take up the prestigious post of praelector of natural sciences. Rees Thomas, who had left Maghull in 1915, returned from military duties and was appointed medical superintendent Rampton State Institution. At the Maudsley, Mott was knighted for his war service, receiving a KBE.

In 1919, the War Office transferred both Maghull and the Maudsley to the Ministry of Pensions. In its attempt to return neurasthenic veterans to productive employment, the Ministry appointed Edward Mapother as the medical superintendent of the Maudsley. However, as he repeatedly complained, treatment regimes were disrupted by the referral of servicemen suffering from severe psychotic disorders who required close supervision for their own safety.<sup>131</sup> Ironically, the Maudsley found itself performing the role for which Maghull had been designed in December 1914. Forced to retrench, the Ministry closed the hospital in October 1920 and it lay empty until the London County Council agreed to fund treatment costs. Reopening in February 1923, it finally fulfilled the function of its original benefactor and became a psychiatric hospital for voluntary patients with its own postgraduate medical school.

Under the Ministry, Maghull assessed and treated ex-servicemen with epilepsy.<sup>132</sup> In the absence of effective medication and restricted employment opportunities, severe cases were often kept in inpatient units. However, government retrenchment saw staffing levels fall and by June 1921, there were only three doctors at Maghull: Montgomery, Hodgson, and Clarke (ratio of one to hundred patients).<sup>133</sup> Many of the clinical lessons learned there appeared to have been lost. When Dr. J. F. E. Prideaux visited Maghull in June 1931, he found many long-term patients “for whom retention in hospital on purely medical grounds is now doubtfully justified.”<sup>134</sup> In July 1933, the Ministry of Pensions

131. Edgar Jones, “Aubrey Lewis, Edward Mapother and the Maudsley,” in *European Psychiatry on the Eve of War: Aubrey Lewis, the Maudsley Hospital and the Rockefeller Foundation in the 1930s*, ed. K. Angel, E. Jones, and M. Neve, *Med. Hist.*, 1923, *Supplement* No. 22, 3–38, 5.

132. “Mental and Neurasthenic Cases for Supervision” (typescript, c. 1922), 1–2, PIN15/57, NA; Memorandum by E. Prideaux, 13 August 1931, PIN15/58, NA.

133. A. H. Williams, Memorandum North-western Region Neurological Requirements including Epileptics, 24 June 1921, 2, PIN15/55, NA.

134. Memorandum by E. Prideaux, 13 August 1931, PIN15/58, NA.

returned Moss Side Hospital to the Board of Control,<sup>135</sup> and it became the third of three high-security hospitals.

#### CONCLUSIONS

The gathering together of so much diverse expertise at both Maghull and the Maudsley was novel in the history of psychological medicine in the UK. Never before had so many doctors and scientists focused on a single psychiatric disorder at any one time. The distinction drawn between organic and psychological causation at Maghull and the Maudsley was not an absolute one, rather a question of emphasis. Although Mott and his team recognized psychological mechanisms, they interpreted shell shock in terms of brain function and explored treatments founded on an understanding of cerebral physiology. By contrast, Rows, Elliot Smith, and Pear thought that knowledge about these processes was too basic to inform explanations of pathology and considered that psychodynamic hypotheses more likely to generate effective clinical interventions. On some issues, the two groups were in agreement. They concurred that shell shock was not a novel disorder but was a variant of disorders seen in the prewar period. They also believed in the value of specialist training and the need for further research. As early as March 1916, Rows had written that "a prolonged study of each separate case will not only provide a means of treatment for the individual, but will also collect a mass of evidence which will help to develop a new and enlarged view of psychological medicine."<sup>136</sup> Indeed, Myers hoped to transmute the services and expertise assembled at Maghull to a psychological clinic to be opened at Cambridge with Rows installed as the physician in charge.<sup>137</sup> In the event, this did not transpire and it was the Maudsley that benefited from the influx of new ideas, principally through the appointment of Edward Mapother as its first medical superintendant.

The training offered in shell shock held at the Maudsley also left a legacy. In 1919, Mott set up a postgraduate course largely for asylum doctors to take the Diploma in Psychological Medicine that had been established by Cambridge University just before the

135. Moss Side Estate, Minutes of Meeting, 17 November 1931, 4, MH58/93, NA.

136. Rows, "Mental Conditions following Strain," 443.

137. Forrester, "1919: Psychology and Psychoanalysis," 59.

outbreak of war.<sup>138</sup> Mott recruited William McDougall, Bernard Hart and Mapother, all former Maghull doctors, to lecture on the course.<sup>139</sup>

The dichotomy between psychodynamic and physiological explanations for shell shock was not resolved. During the interwar period, the Maudsley followed the medical model of mental illness, though Mapother did agree to the setting up of a department of psychotherapy. It was left to other institutions, such as the Tavistock Square Clinic for Functional Nervous Disorders, opened in September 1920 under the directorship of Hugh Crichton-Miller<sup>140</sup> and the Cassel Hospital under T. A. Ross to pursue the psychoanalytical treatments explored at Maghull.

#### ACKNOWLEDGMENTS

I thank Dr. Caroline Mulligan of Ashworth Hospital for access to the former Moss Side Military Hospital. Thanks are also due to Professor Elizabeth Valentine for considerable assistance with source material and to Dr. Fiona Subotsky for inspiring the project and information on J. W. Astley Cooper.

#### FUNDING

None.

138. "Obituary, Sir Frederick Mott," *Br. Med. J.*, 1926, 1, 1063–66.

139. Mott, "Second Maudsley Lecture," 324.

140. H. V. Dicks, *50 Years of the Tavistock Clinic* (London: Routledge and Kegan Paul, 1970), 14.